C593 15" LCD MONITOR

USER'S MANUAL

Installing The Monitor

Follow these steps to install the monitor,

1. Before you connect the cables,make sure that the monitor and the system unit power switches are OFF.

2. Please follow the following drawing to remove the plastic back over in order to connect the signal cable and power cable.

3. Plug one end of the 15pin signal cable to the monitor and the other end to the video signal connector at the rear of the system. Tighten the two screws on the cable connector on both ends, otherwise the screen will be abnormal and LED light is yellow color, not the normal green color.

4. Connect the power to the monitor through the AC/DC adapter.

5. Connect the power cord on the AC outlet, see the below.

Content

Operating Instructions

Thank you for purchasing this high-resolution multi-scan color monitor. Please read this guide thoroughly before installation.

FCC RADIO FREQUENCY INTERFERENCE STATEMENT WARNING: (FOR FCC CERTIFIED MODELS)

This monitor has been tested and found compliant with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide proper protection against harmful interference to a residential installation. This monitor generates, uses, and can radiate radio frequency energy. Harmful interference to radio communication may result if it is not properly installed and used. However, there is no guarantee that interference will not occur in a particular installation. If this monitor does cause serious interference to radio or television reception, resetting the monitor may resolve the problem. Moreover, users are encouraged to correct interference by doing one or more of the following:

- Reorient or relocate the receiving antenna.
- Move the monitor and the receiver further away from each other.
- Connect the monitor into an outlet on a circuit different from that to which the receiver is connected.
- Consult your local dealer or a qualified technician.

FCC Warning:

To assure a continued FCC compliance, a user must use a grounded power supply cord and the provided shielded video interface cable with bonded ferrite cores. Also, any unauthorized changes or modifications to this monitor will void the user's authority to operate this device.

Note: If necessary, shielded interface cables and the A.C. power cord must be used to meet the emission level limits.

EMI Certification

The Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulation. Cet appareil numerique de class B respecte toutes les exigences du Reglement sur lc materiel brouilleur du Canada.

Safety Precautions

This monitor is manufactured and tested on the ground principle that a user's safety comes first. However, improper use or installation may not only damage the monitor but endanger the user as well. As a safety precaution, go over the following WARNINGS carefully before installation, and keep this guide handy.

Warnings:

- This monitor should be operated only at the correct power sources indicated on the label at the rear end of the monitor. If you are unsure of the power supply in your residence, consult your local dealer or Power Company.

- Do not try to repair the monitor yourself, as it contains no user-serviceable parts. The monitor should only be repaired by a qualified technician.

- Do not remove the monitor cabinet. There are high-voltage parts inside that may cause electric shock to human bodies, even when the power cord is disconnected.

- Stop using the monitor if the cabinet is damaged. Have it checked by a service technician.

- Put your monitor only in a clean, dry environment. Unplug the monitor immediately if it gets wet, and consult your service technician.

- Always unplug the monitor before cleaning it. Clean the cabinet with a clean, dry cloth. Apply non-ammonia-based cleaner onto the cloth, not directly onto the glass screen.

- Keep the monitor away from magnetic objects, motors, TV sets, and transformers.

- Do not place heavy objects on the cable or power cord.

- For PLUG CABLE EQUIPMENT, the socket outlet should be installed near the equipment and should be easily accessible.

Care and Maintenance

Care

- Avoid exposing your monitor directly to sunlight or other heat sources. Place your monitor away from the sun to reduce glare.

- Put your monitor in a well-ventilated area. Do not place anything heavy on top of your monitor.

- Make certain that your monitor is installed in a clean and moisture-free area.

- Keep your monitor away from magnets, motors, transformers, speakers, and TV sets.

Safety Tips

- If smoke, abnormal noise or odor comes out of your monitor, switch off the power immediately and call your service center.

- Never remove the rear cover of your monitor cabinet. The display unit inside contains high-voltage parts and may cause electric shock to human bodies.

- Never try to repair the monitor yourself. Always call your service center or a qualified technician to fix it.

Note: This user's manual contains graphics and information that is for reference purposes only and is subject to change without notice.

Control Functions

The Monitor control functions are located on the lower center portion of the front panel. These are shown in the figure below and described in the following paragraphs.

Auto Menu Select   ─   +   ⏻
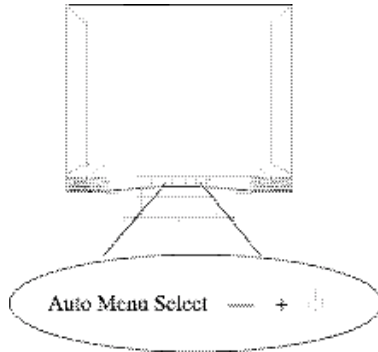
1. ⏻ : **Power switch**

   Use the power switch to turn power ON or OFF. We recommend turning your system power on first, then the LCD monitor

2. **- & + : Decrement & Increment**

   These two keys are used to decrease or increase the values of each selected item.

3. **Selection: Down key**

   This key is used to select the wanted adjustment item. It always move down to the next item.

4. **Menu**

   Press the Menu key to activate the on-screen display. This is a toggle key, so press twice to turn off the on-screen display. After 30 seconds of idle time, the OSD screen will automatically turn off.

5. **Auto adjustment**

   Press this key to get better visual performance.

Adjustment Procedure

1. Press the Menu key to activate the OSD screen. The screen below will appear.

   Note: Perform the procedure above whenever you need to change a setting. For the succeeding sections, this step will not be included, and users will be presumed to have performed the procedure.

   ### OSD SCREEN

1024X768	75Hz/60KHz
→ AUTO ADJUSTMENT	
◑	MENU
⊡	MENU
LANGUAGE	MENU
DOS/GFX	OFF
☺	USER
☼	100
VERSION	XGAD9B11-5100

2. Use the selection key to move to the desired item.

3. Use the - & + key to carry out the desired function or to go to the second menu item and perform further changes.

Auto-Adjustment

We strongly recommend that you use this item to get the optimized visual quality. Use the selection key to select auto-adjustment, then press - or + to get the optimized quality.

RGB Adjustment

Use the selection key to select the icon, then press - or +. The screen below will appear.

```
┌─────────────────────────────────────────────────┐
│  1024X768        75 Hz/60 KHz                     │
│ ─────────────────────────────────────────────────│
│  Auto-Balance                                     │
│  CONTRAST                                         │
│        RED                              20        │
│        GREEN                            18        │
│        BLUE                             19        │
│  BALANCE                                          │
│        RED                              49        │
│ ───► GREEN                            50        │
│        BLUE                             26        │
│                                                   │
│  ████████████████████████████                    │
│ ─────────────────────────────────────────────────│
│  VERSION                    XGAD9B11-5100         │
└─────────────────────────────────────────────────┘
```

Contrast Value Adjustment

Use the selection key to select the CONTRAST field, then press - & + to get the best contrast optimization. You can adjust R,G,B simultaneously or adjust each Red, Green, and Blue channel separately. You can also use this field to change purity of the RGB levels.

Color Balance

Use the selection key to select the COLOR BALANCE field, then press - & + to get the best color balance effect or to separately set the RGB color values. You can also use this field to change intensity of the RGB levels.

The easiest way to adjust the contrast and color balance setting is to use auto-balance.

Geometry Adjustment

Use the selection key to select the icon, then press - & +. The screen below will appear.

```
┌─────────────────────────────────────────────────┐
│  1024X768        75 Hz/60 KHz                     │
├─────────────────────────────────────────────────┤
│   ┌──┐                                       21   │
│   ┌─┐                                        33   │
│   ←→                                       1344   │
│ → PHASE                                      49   │
│                                                   │
│  ┌──────────────────────────────────────────┐    │
│  │████                                       │    │
│  └──────────────────────────────────────────┘    │
├─────────────────────────────────────────────────┤
│  VERSION                      XGAD9B11-5100       │
└─────────────────────────────────────────────────┘
```

If you need to go back to the previous OSD menu screen, press the MENU key.

Vertical & Horizontal Position Adjustment

1. Use the selection key to move to the icon, then press - & + to move the whole screen left or right to the center position.

2. Use the selection key to move to the icon, then press - & + to move the whole screen down or up to the center position.

Viewing Screen Size Adjustment

Use the selection key to move to the icon, then press - & + to get the larger viewing size.

Phase Adjustment

You can adjust phase tracking of the display signal to reduce display flicker. An invalid phase tracking will cause unstable and flicking display. Use the selection key to move to the Phase item, then press - & + to get better image quality.

Multi-language support

You can select five OSD languages for your convenience.

1024X768	75 Hz/60 KHz

→ English
German
French
Italian
Spanish

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DOS Txt/GFX

You can select display mode as 640 x 400 (graphic mode) or 720 x 400 (text mode).

Color Temperature

Three modes are provided: User Mode, 6500, and 9300. Use the selection key to select the Color Temperature field, then press - & + to select the color temperature setting.

Brightness Adjustment

Use the selection key to select the Brightness field, then press - & + to change the brightness value.

Understanding the Display Resolution Setting

In the OSD screen, you will see the Horizontal frequency (HF), Vertical frequency (VF), display resolution (MODE) and the monitor Firmware version (ROM LEVEL). These values are automatically detected by the monitor, and the settings cannot be changed by the user.

General Specifications

LCD type:	15.0″ XGA Color TFT
Input Signal:	Analog (0.7Vp-p/75 ohm positive)
Screen area:	304.1 mm x 228.1 mm
Dot Pitch:	0.297 mm
Scanning frequency:	(H) 31.46 KHz-60 KHz , (V) 60 Hz-75 Hz
Resolution:	1024 x 768
Refresh Rate:	80 MHz (maximum)
Display Color:	16.2M colors (dithering)
Luminance:	200 cd/m^2 (Typ.)
Contrast Ratio:	350 (Typ.)

Response Time:	Typ.	Max (10% ~ 90%)
Rising time:	7 ms	22 ms
Falling time:	23 ms	38 ms

View Angle (CR>10):	Horizontal: 120 (Typ.), Vertical: 100 (Typ.)
Control Type:	OSD
Plug & Play:	VESA DDC1/2B
Audio:	Not available
Dimension (mm)	
Panel (H x W):	304.128 x 228.96 mm (Please include inches for U.S)
Overall (H x W x D):	357.5 x 375 x 1 18.3 mm (include Inches)
Net weight:	5.0 kg (include weight in pounds)
Tilt:	Up 30° / Down 5°
AC Input:	AC 110 V ~ 240 V (48-62 Hz)
Power Management:	VESA DPMS
Power Consumption:	30 W
Regulatory Compliance:	FCC Class B, CE
Ambient Temperature:	0° ~ 45° (operating), -20° ~ 60° (storage) (include temperature in Fahrenheit)
Humidity (Relative):	10 ~ 85% non-condensing (operating) 10 ~ 95% non-condensing (storage)

General Performance

Preset timing is shown as follows:

Resolution	H/V Frequency	CLK count of H period
640 x 480	60Hz/31.47KHz	800
640 x 480	72Hz/37.86KHz	832
640 x 480	75Hz/37.5KHz	840
800 x 600	56.3Hz/35.16KHz	1024
800 x 600	60.3Hz/37.88Khz	1056
800 x 600	72.2Hz/48/08KHz	1040
800 x 600	75Hz/46.87KHz	1056
1024 x 768	60Hz/48.36KHz	1344
1024 x 768	70Hz/56.47KHz	1328
1024x768	75Hz/60Khz	1312
720 x 400	70Hz/31.47KHz	900
640 x 350	70Hz/31.47Khz	800
640 x 400	70Hz/31.47Khz	800
1024 x 768	74.9Hz/60.2KHz	1328